



GERMAN MILLS CREEK GEOMORPHIC SYSTEMS MASTER PLAN EVALUATION OF ALTERNATIVES (PHASE 3) APPENDIX F

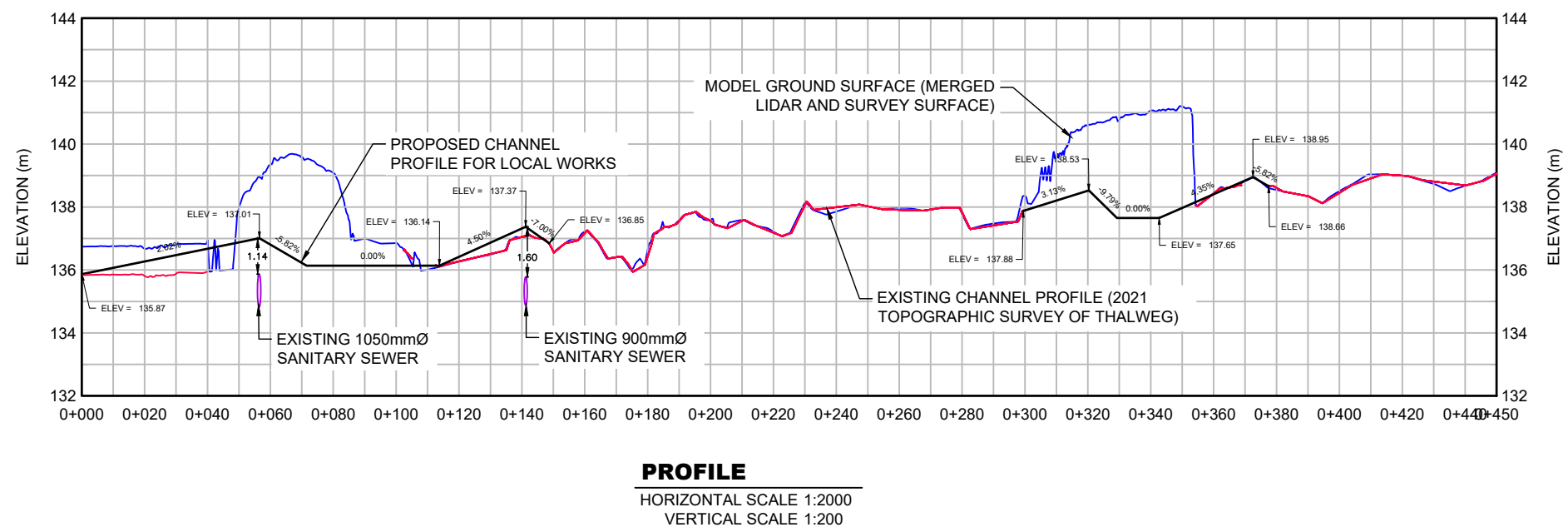
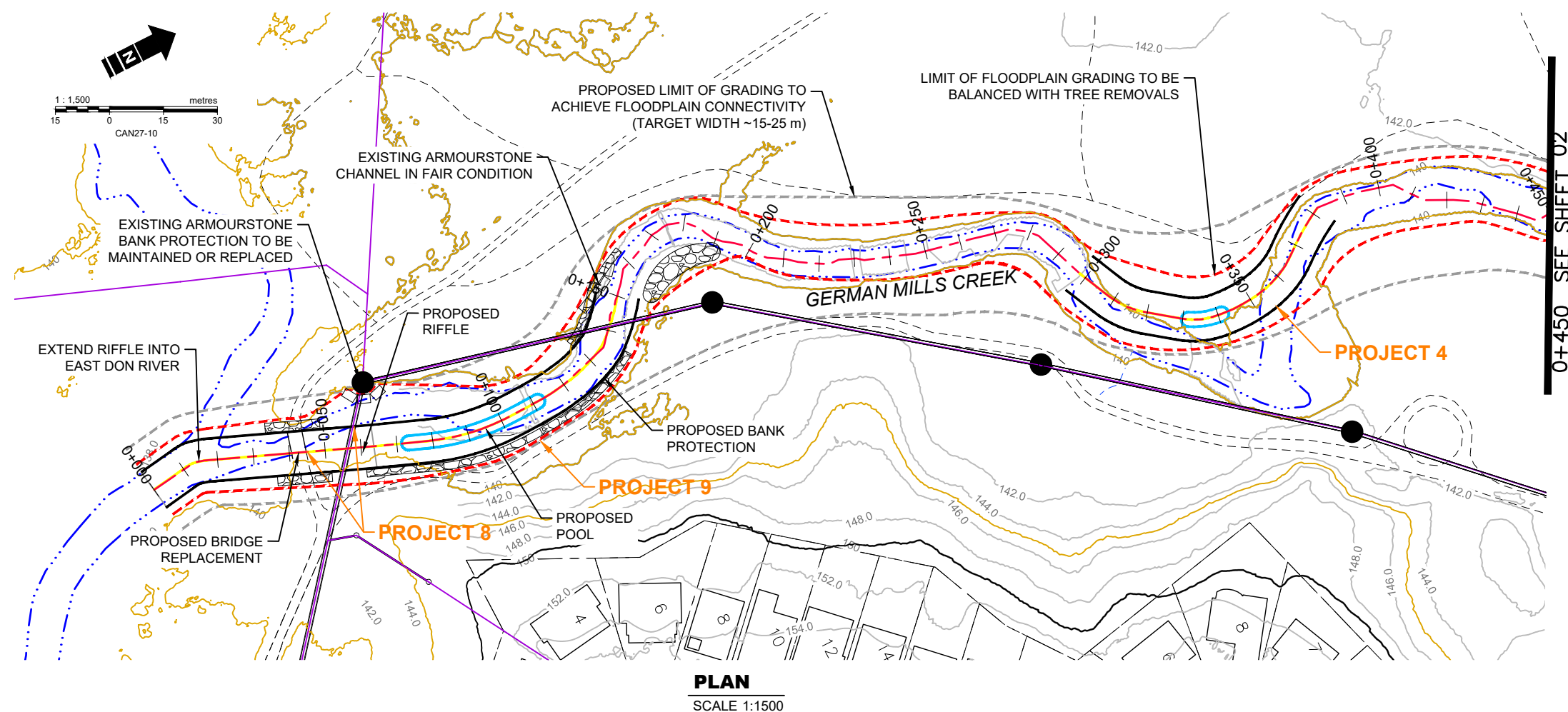
Prepared for:
CITY OF TORONTO

Prepared by:
MATRIX SOLUTIONS INC., A MONTROSE ENVIRONMENTAL COMPANY

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December 2024
Mississauga, Ontario

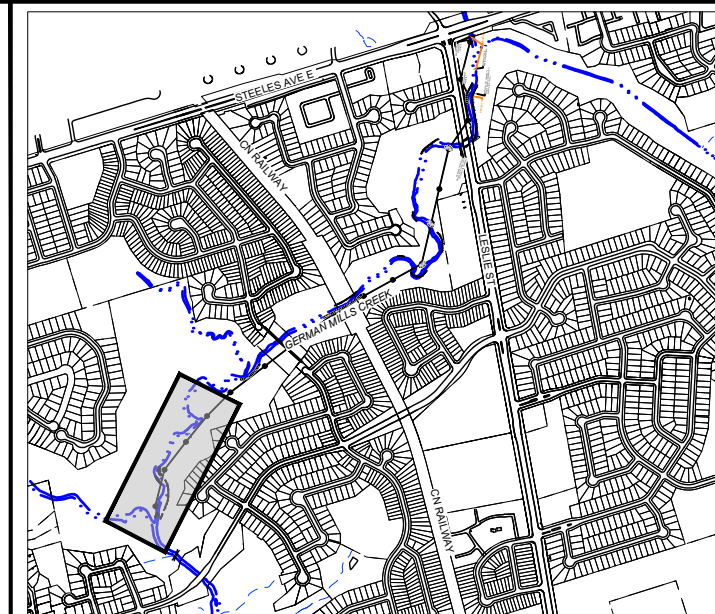
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APPENDIX F-1b
Concept Drawings for Design Alternatives 3 and 4
























REFERENCE:

1. BASE MAP TOPOGRAPHY COMPILED FROM CITY OF TORONTO OPEN SOURCE DATA, TWAG SERVICING DATA AND DRF15170_TOPO2D.
2. MAPPED CREEK ALIGNMENT ON PLAN FROM 2018 ORTHOPHOTOGRAPHY DIGITIZED BY MATRIX SOLUTIONS.
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5. COORDINATE SYSTEM ONTARIO MTM ZONE 10 NAD27.



KEY MAP
NOT TO SCALE

LEGEND

	LOT LINE		CHANNEL REALIGNMENT
	RIVER SHORELINE		CHANNEL BANK
	THALWEG		MINIMUM GRADING LIMIT
	TRAIL		MAXIMUM GRADING LIMIT
	EXISTING CONTOUR (2m INTERVAL)		EXISTING ARMOURSTONE
	SANITARY SEWER		PROPOSED BANK AND TOP RESTORATION WITH EXPOSED ARMOURSTONE
	STORM SEWER		PROPOSED BANK AND TOP RESTORATION WITH BURIED ARMOURSTONE
	WATERMAIN		MAINTENANCE HOLE
	SANITARY SEWER		PROPOSED BANK RESTORATION AND BIOENGINEERING
	MAINTENANCE HOLE		RIFFLE
			POOL

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B	2023-01-30	ISSUE FOR REVIEW	NC	RP	KW
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No.	DATE	DESCRIPTION	BY	CHK.	DRN

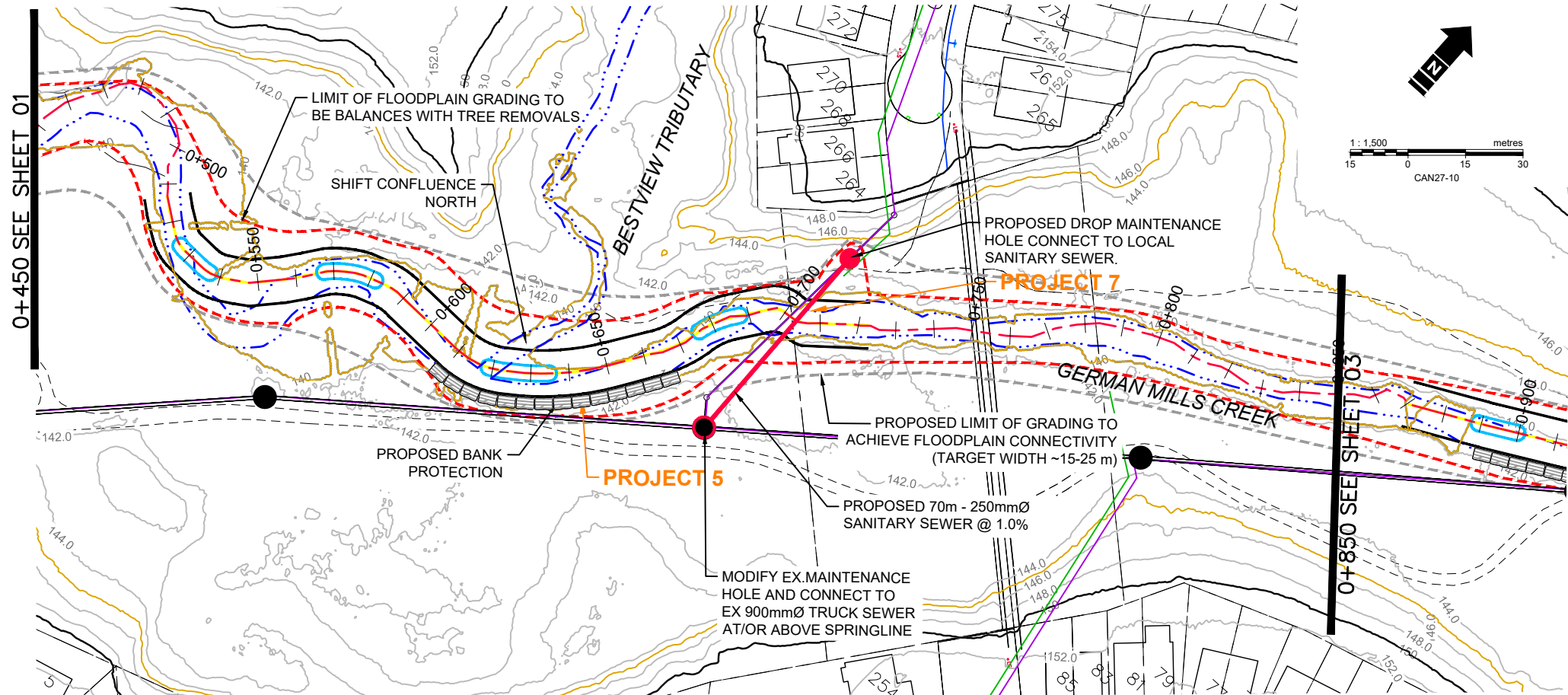


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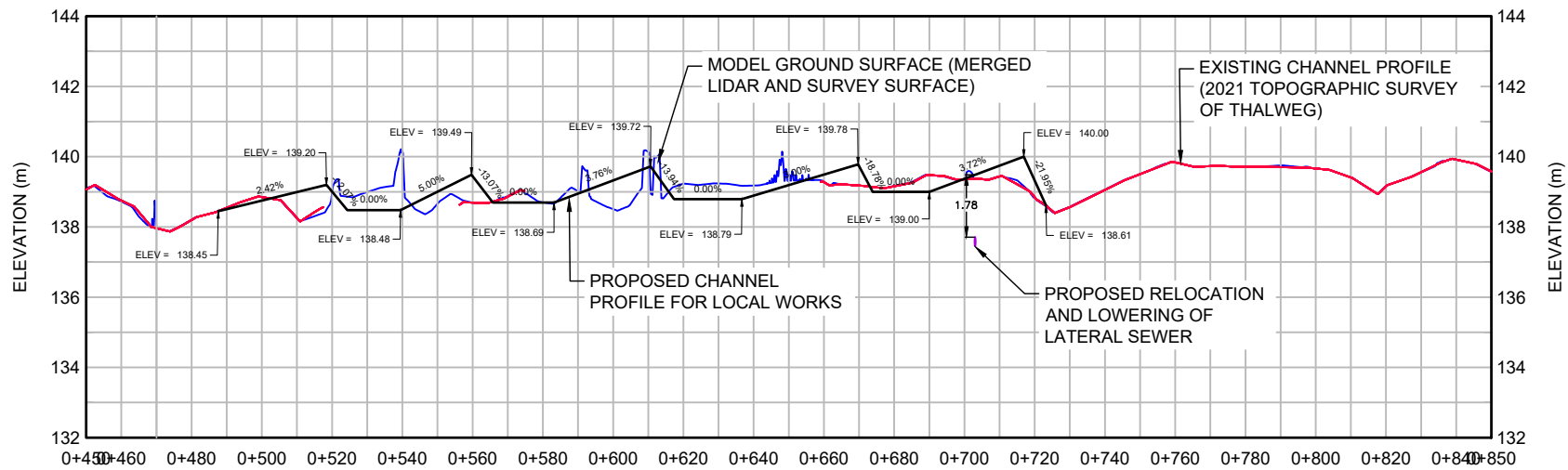
ALTERNATIVE 3 - LOCAL WORKS WITH REACH SCALE CONNECTIONS STA. 0+000 TO 0+450

DATE:	APRIL 2022	TECHNICAL:	N. CYPLES	REVIEWER:	R. PHILLIPS	DRAWN:	K. WEILE
PROJECT:	32227-504			REVISION:	A	DRAWING:	F10

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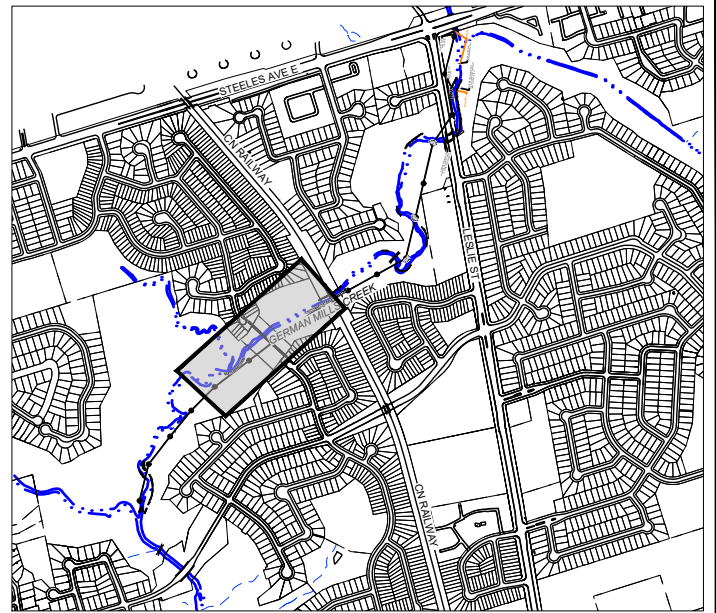


PLAN
SCALE 1:1500



PROFILE
HORIZONTAL SCALE 1:2000
VERTICAL SCALE 1:200

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 5. COORDINATE SYSTEM ONTARIO MTM ZONE 10 NAD27.



KEY MAP
NOT TO SCALE

LEGEND	
LOT LINE	CHANNEL REALIGNMENT
RIVER SHORELINE	CHANNEL BANK
THALWEG	MINIMUM GRADING LIMIT
TRAIL	MAXIMUM GRADING LIMIT
EXISTING CONTOUR (2m INTERVAL)	EXISTING ARMOURSTONE
SANITARY SEWER	PROPOSED BANK AND TOE RESTORATION WITH EXPOSED ARMOURSTONE
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WATERMAIN	PROPOSED BANK RESTORATION AND BIOENGINEERING
SANITARY SEWER	RIFFLE
MAINTENANCE HOLE	POOL

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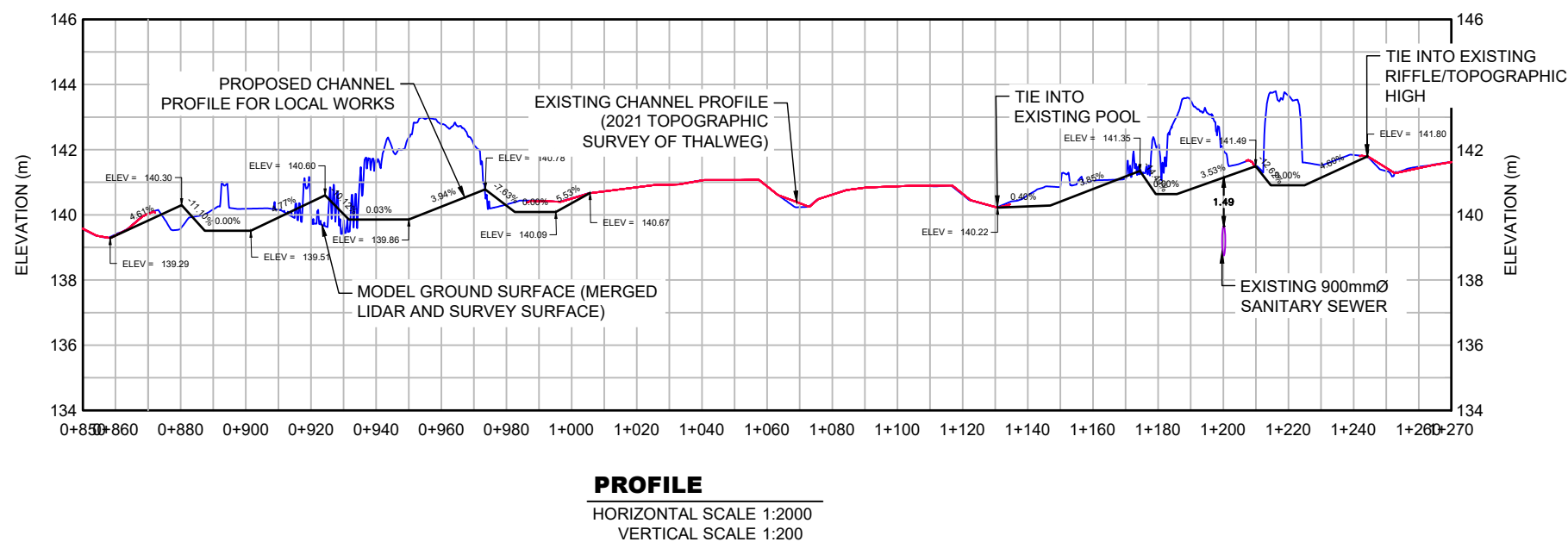
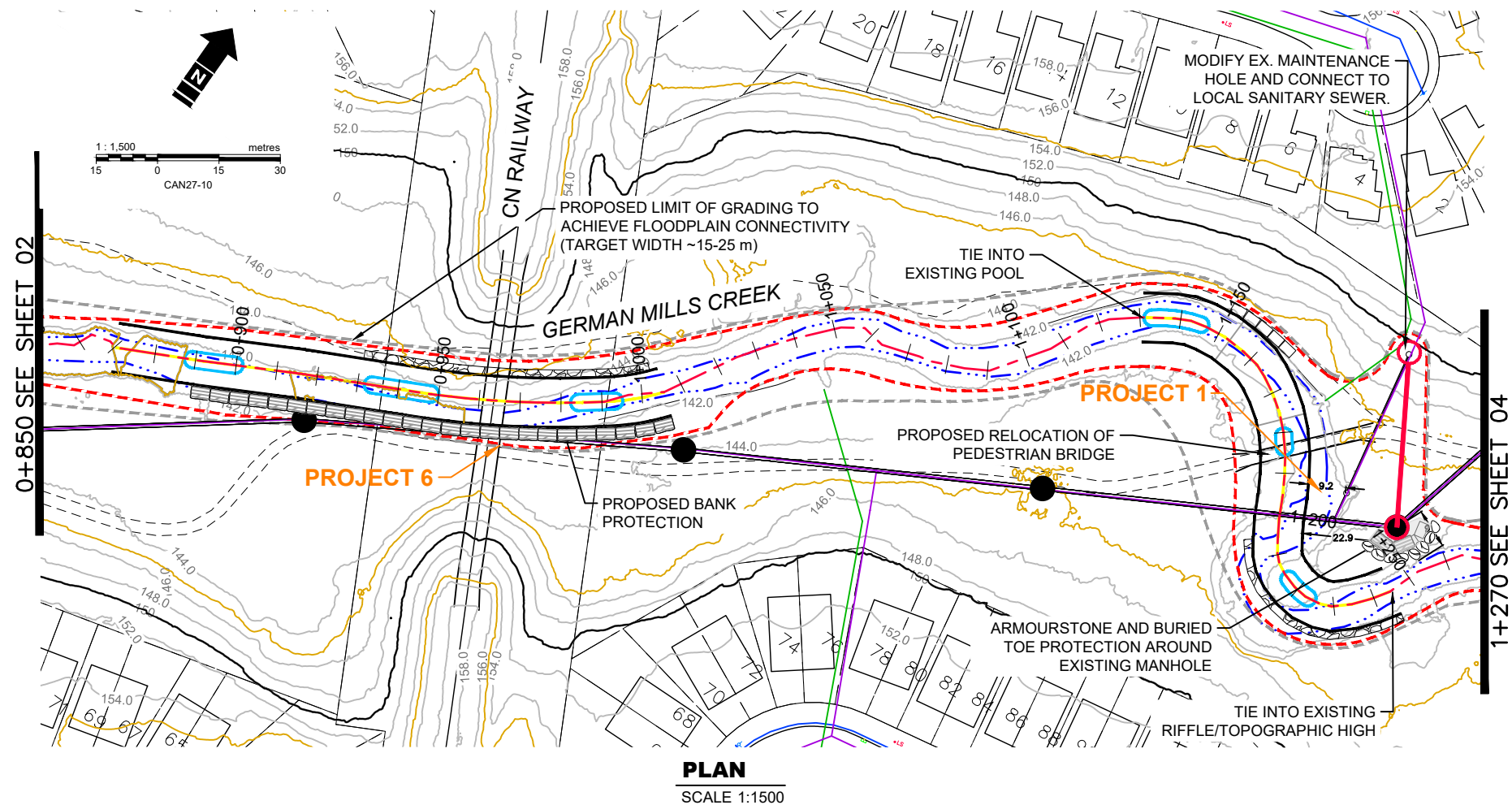


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**ALTERNATIVE 3 - LOCAL WORKS WITH
REACH SCALE CONNECTIONS
STA. 0+450 TO 0+850**

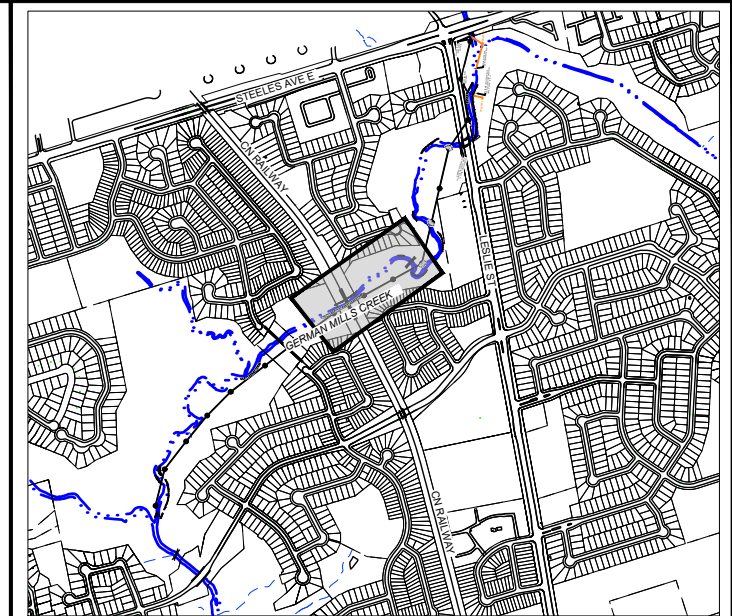
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PROJECT:	32227-504	REVISION:	A	DRAWING:	F1p		

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5. COORDINATE SYSTEM ONTARIO MTM ZONE 10 NAD27.



KEY MAP
NOT TO SCALE

LEGEND

	LOT LINE		CHANNEL REALIGNMENT
	RIVER SHORELINE		CHANNEL BANK
	THALWEG		MINIMUM GRADING LIMIT
	TRAIL		MAXIMUM GRADING LIMIT
	EXISTING CONTOUR (2m INTERVAL)		EXISTING ARMOURSTONE
	SANITARY SEWER		PROPOSED BANK AND TOE RESTORATION WITH EXPOSED ARMOURSTONE
	STORM SEWER		PROPOSED BANK AND TOE RESTORATION WITH BURIED ARMOURSTONE
	WATERMAIN		
	SANITARY SEWER		
	MAINTENANCE HOLE		PROPOSED BANK RESTORATION AND BIOENGINEERING
			RIFFLE
			POOL

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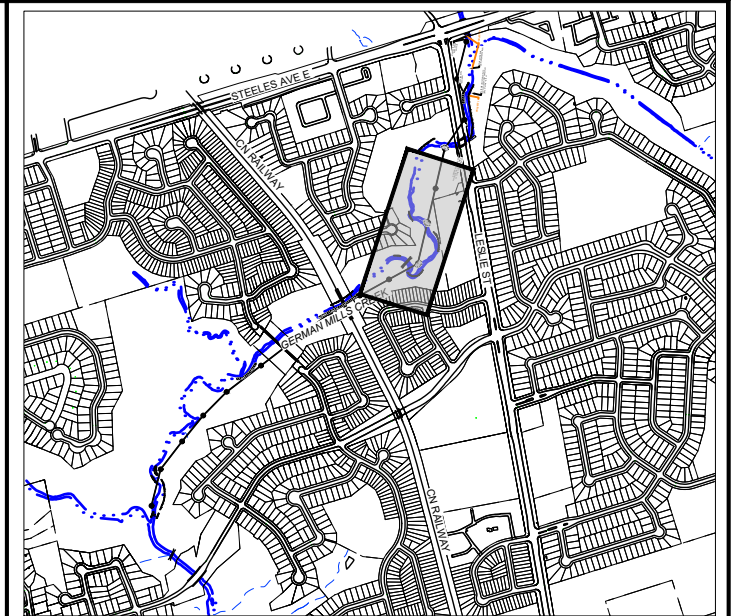


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ALTERNATIVE 3 - LOCAL WORKS WITH REACH SCALE CONNECTIONS STA. 0+850 TO 1+270






















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KEY MAP
NOT TO SCALE

LEGEND

- | | | | |
|---|-----------------------------------|---|--|
|  | LOT LINE |  | CHANNEL REALIGNMENT |
|  | RIVER SHORELINE |  | CHANNEL BANK |
|  | THALWEG |  | MINIMUM GRADING LIMIT |
|  | TRAIL |  | MAXIMUM GRADING LIMIT |
|  | EXISTING CONTOUR
(2m INTERVAL) |  | EXISTING ARMOURSTONE |
|  | SANITARY SEWER |  | PROPOSED BANK AND TOE
RESTORATION WITH
EXPOSED ARMOURSTONE |
|  | STORM SEWER |  | PROPOSED BANK AND TOE
RESTORATION WITH
BURIED ARMOURSTONE |
|  | WATERMAIN |  | PROPOSED BANK
RESTORATION AND
BIOENGINEERING |
|  | SANITARY SEWER |  | PROPOSED BANK
RESTORATION AND
BIOENGINEERING |
|  | MAINTENANCE HOLE |  | RIFFLE |
| | |  | POOL |

REVISION

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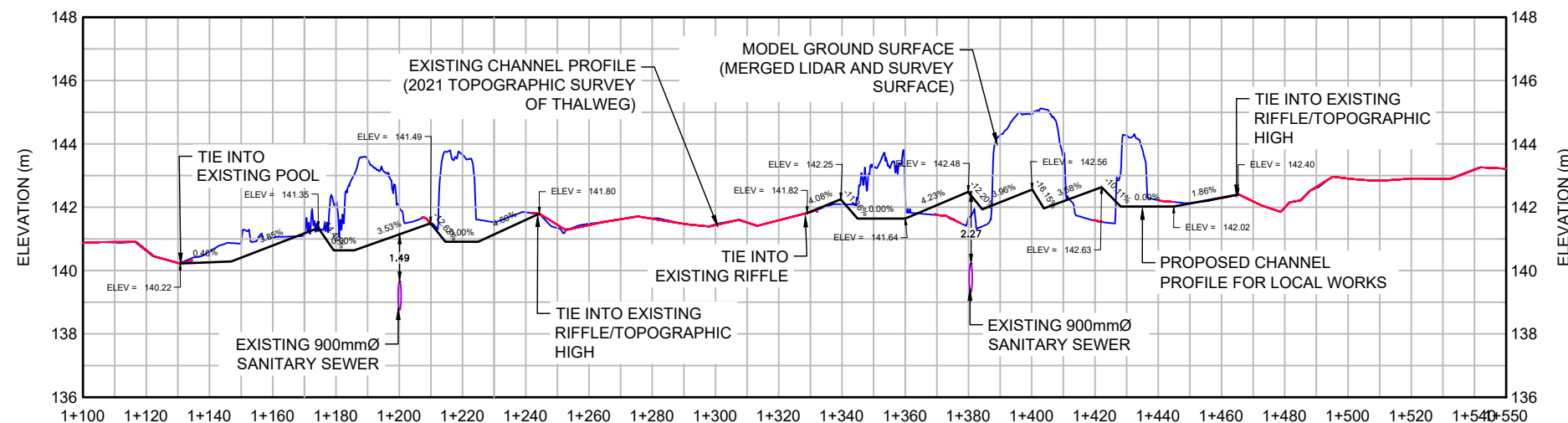
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ALTERNATIVE 3 - LOCAL WORKS WITH REACH SCALE CONNECTIONS STA. 1+100 TO 1+550

DATE:	APRIL 2022	TECHNICAL:	N. CYPLES	REVIEWER:	R. PHILLIPS	DRAWN:	K. WEILER
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PROJECT:	REVISION:	DRAWING:
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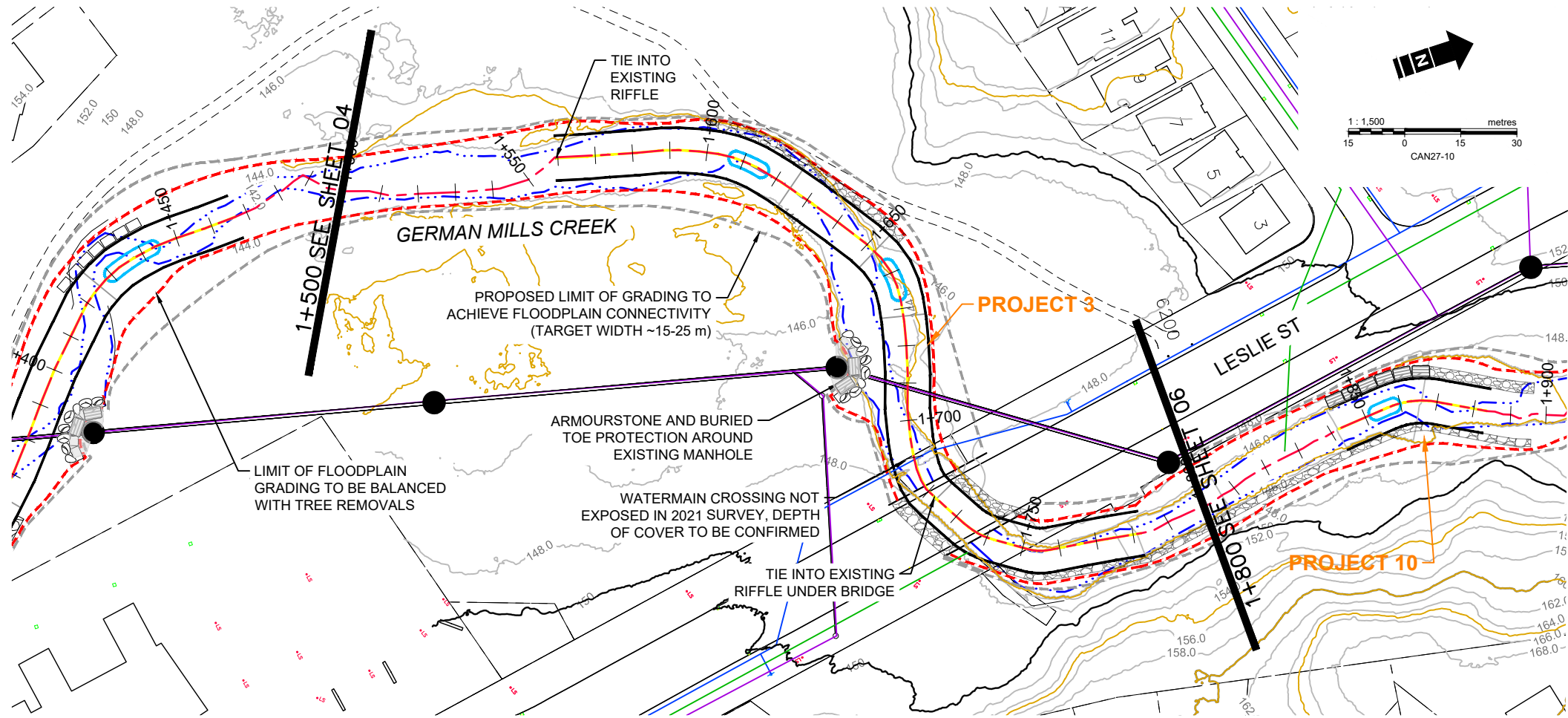


PROFILE

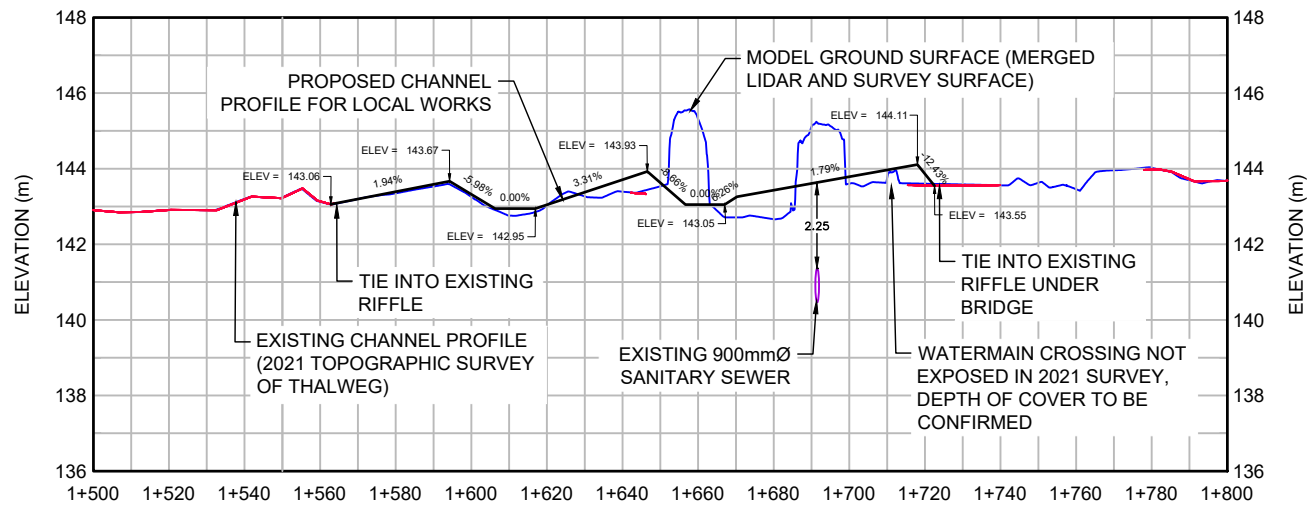
HORIZONTAL SCALE 1:2000
VERTICAL SCALE 1:200

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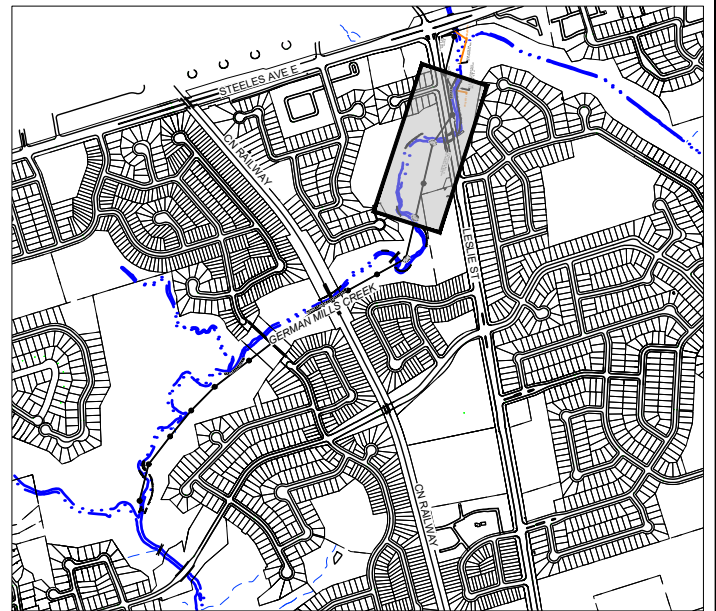


PLAN
SCALE 1:1500



PROFILE
HORIZONTAL SCALE 1:2000
VERTICAL SCALE 1:200

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KEY MAP
NOT TO SCALE

LEGEND	
	LOT LINE
	RIVER SHORELINE
	THALWEG
	TRAIL
	EXISTING CONTOUR (2m INTERVAL)
	SANITARY SEWER
	STORM SEWER
	WATERMAIN
	SANITARY SEWER
	MAINTENANCE HOLE
	CHANNEL REALIGNMENT
	CHANNEL BANK
	MINIMUM GRADING LIMIT
	MAXIMUM GRADING LIMIT
	EXISTING ARMOURSTONE
	PROPOSED BANK AND TOE RESTORATION WITH EXPOSED ARMOURSTONE
	PROPOSED BANK AND TOE RESTORATION WITH BURIED ARMOURSTONE
	PROPOSED BANK RESTORATION AND BIOENGINEERING
	RIFFLE
	POOL

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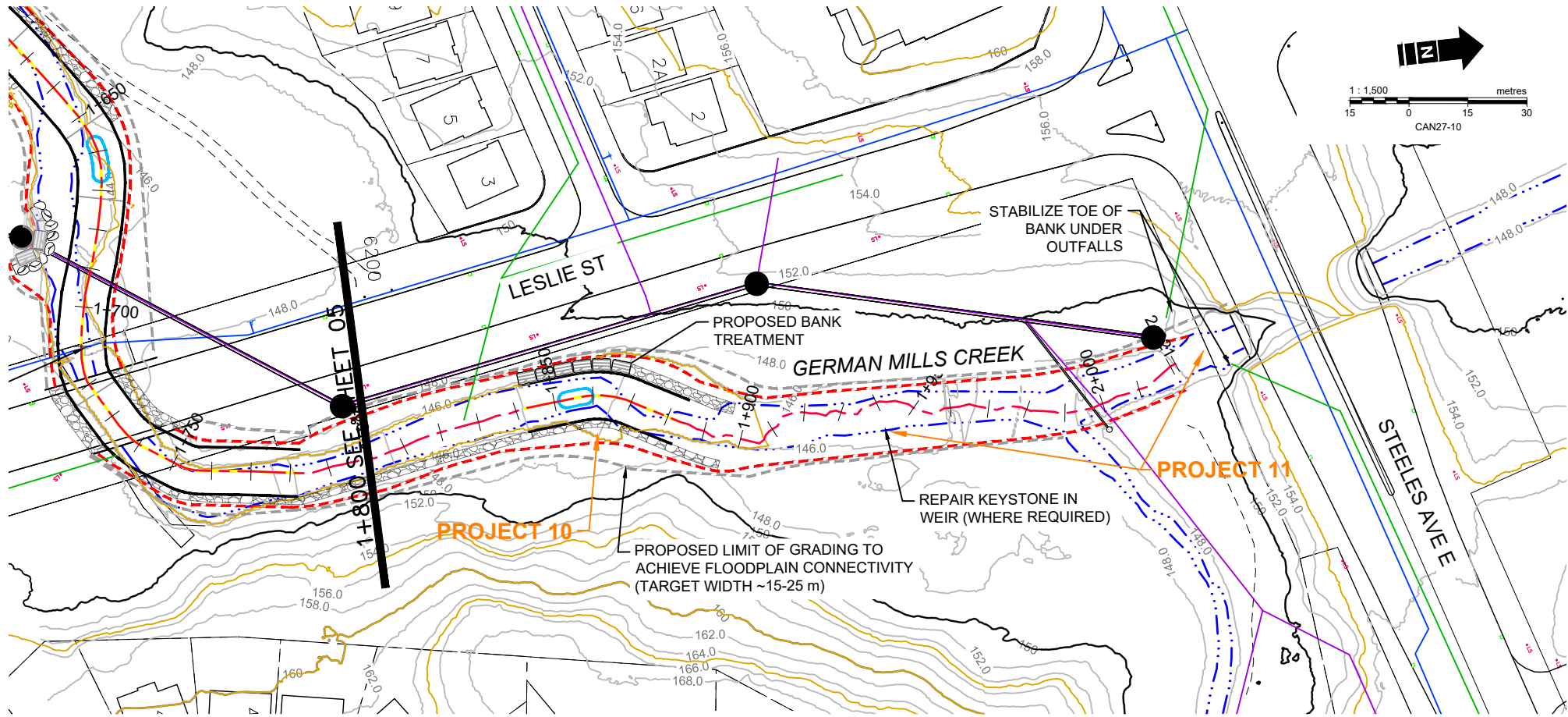


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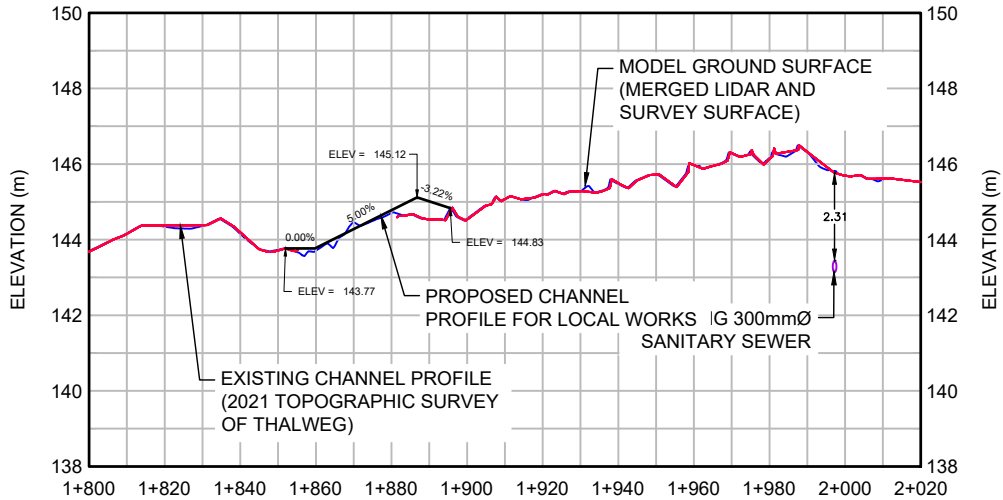
**ALTERNATIVE 3 - LOCAL WORKS WITH
REACH SCALE CONNECTIONS
STA. 1+500 TO 1+800**

DATE:	APRIL 2022	TECHNICAL:	N. CYPLES	REVIEWER:	R. PHILLIPS	DRAWN:	K. WEILER
PROJECT:	32227-504	REVISION:	A	DRAWING:	F1s		

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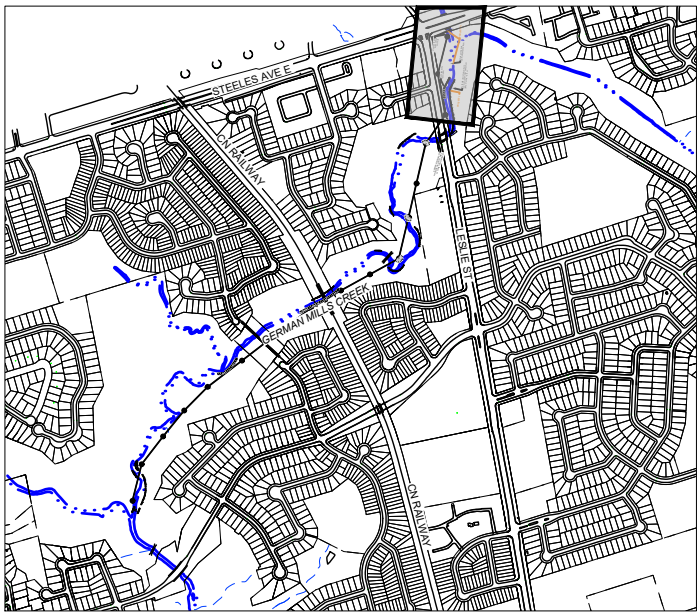


PLAN
SCALE 1:1500



PROFILE
HORIZONTAL SCALE 1:2000
VERTICAL SCALE 1:200

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KEY MAP
NOT TO SCALE

LEGEND	
LOT LINE	CHANNEL REALIGNMENT
RIVER SHORELINE	CHANNEL BANK
THALWEG	MINIMUM GRADING LIMIT
TRAIL	MAXIMUM GRADING LIMIT
EXISTING CONTOUR (2m INTERVAL)	EXISTING ARMOURSTONE
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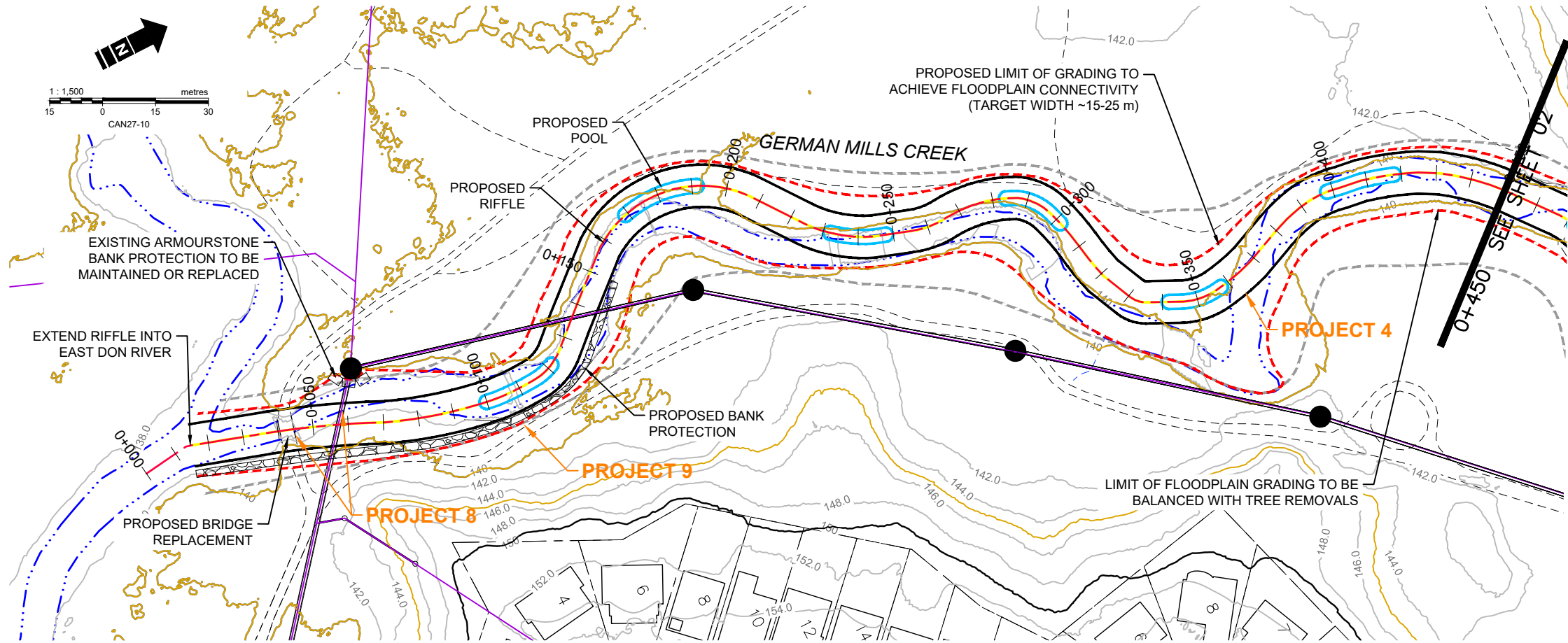


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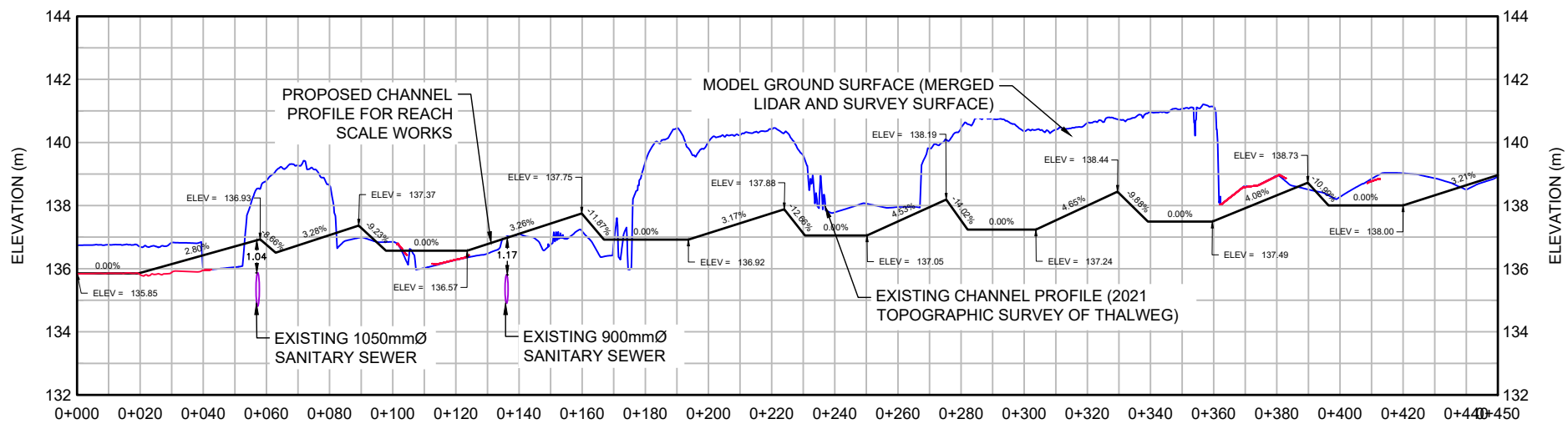
**ALTERNATIVE 3 - LOCAL WORKS WITH
REACH SCALE CONNECTIONS
STA. 1+800 TO 2+020**

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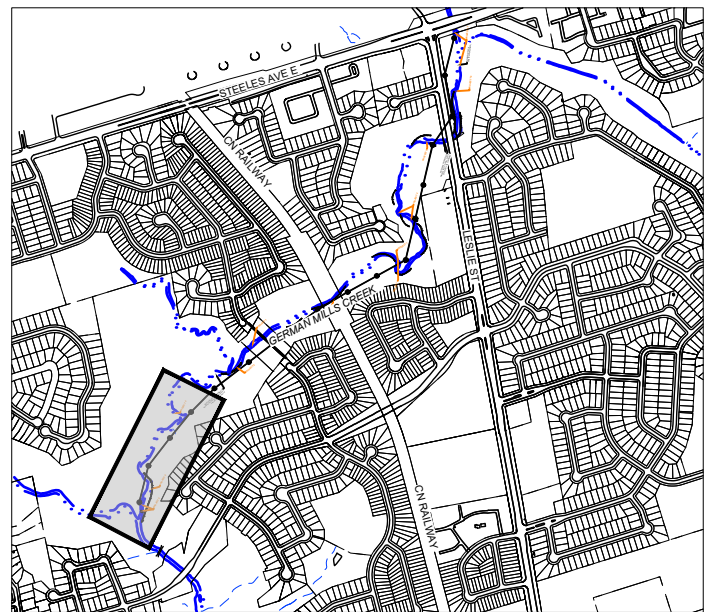


PLAN
SCALE 1:1500



PROFILE
HORIZONTAL SCALE 1:2000
VERTICAL SCALE 1:200

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NOT TO SCALE

LEGEND	
	LOT LINE
	RIVER SHORELINE
	THALWEG
	TRAIL
	EXISTING CONTOUR (2m INTERVAL)
	SANITARY SEWER
	STORM SEWER
	WATERMAIN
	SANITARY SEWER
	MAINTENANCE HOLE
	CHANNEL REALIGNMENT
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	MINIMUM GRADING LIMIT
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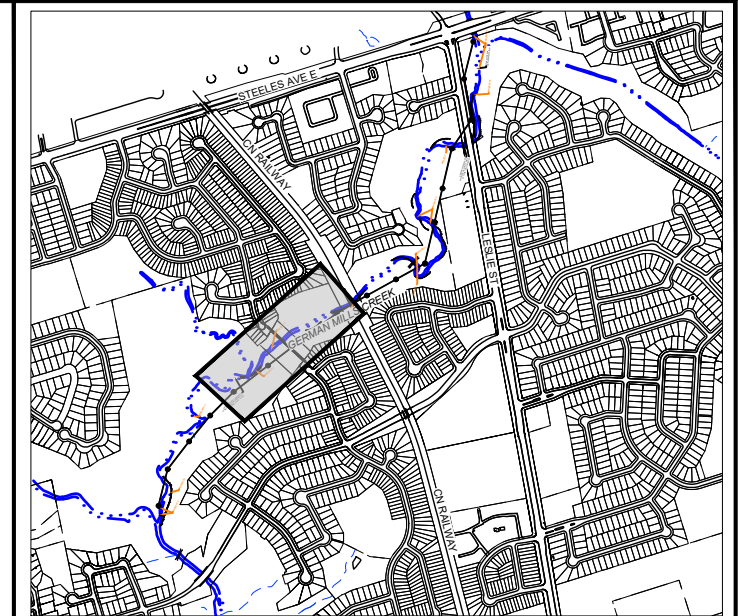


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GERMAN MILLS GSMP EA

**ALTERNATIVE 4 - REACH SCALE WORKS
STA. 0+000 TO 0+450**





















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KEY MAP
NOT TO SCALE

LEGEND

- | | | | |
|---|-----------------------------------|---|--|
|  | LOT LINE |  | CHANNEL REALIGNMENT |
|  | RIVER SHORELINE |  | CHANNEL BANK |
|  | THALWEG |  | MINIMUM GRADING LIMIT |
|  | TRAIL |  | MAXIMUM GRADING LIMIT |
|  | EXISTING CONTOUR
(2m INTERVAL) |  | EXISTING ARMOURSTONE |
|  | SANITARY SEWER |  | PROPOSED BANK AND TOE
RESTORATION WITH
EXPOSED ARMOURSTONE |
|  | STORM SEWER |  | PROPOSED BANK AND TOE
RESTORATION WITH
BURIED ARMOURSTONE |
|  | WATERMAIN | | |
|  | SANITARY SEWER | | |
|  | MAINTENANCE HOLE |  | PROPOSED BANK
RESTORATION AND
BIOENGINEERING |
| | |  | RIFFLE |
| | |  | POOL |

REVISION

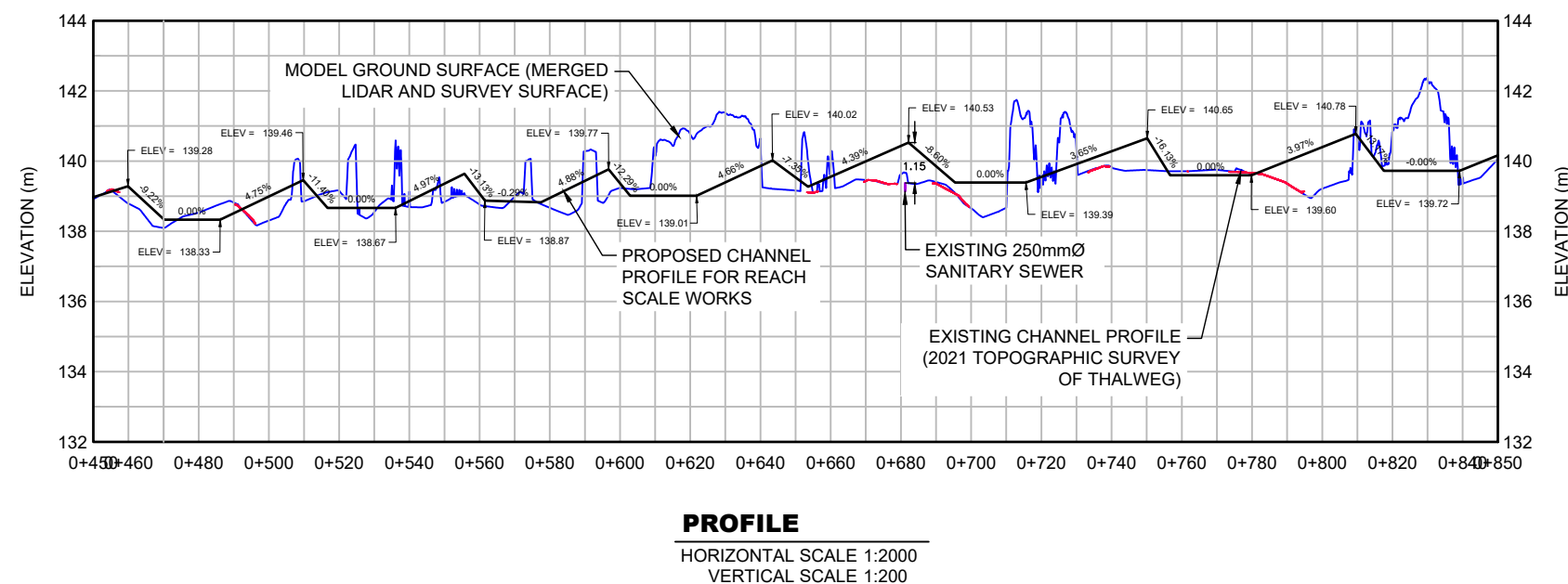
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ALTERNATIVE 4 - REACH SCALE WORKS STA. 0+450 TO 0+850

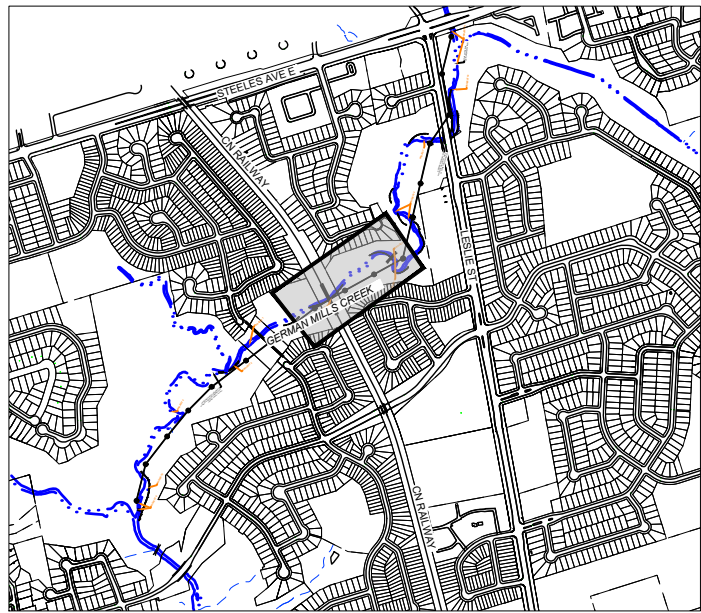
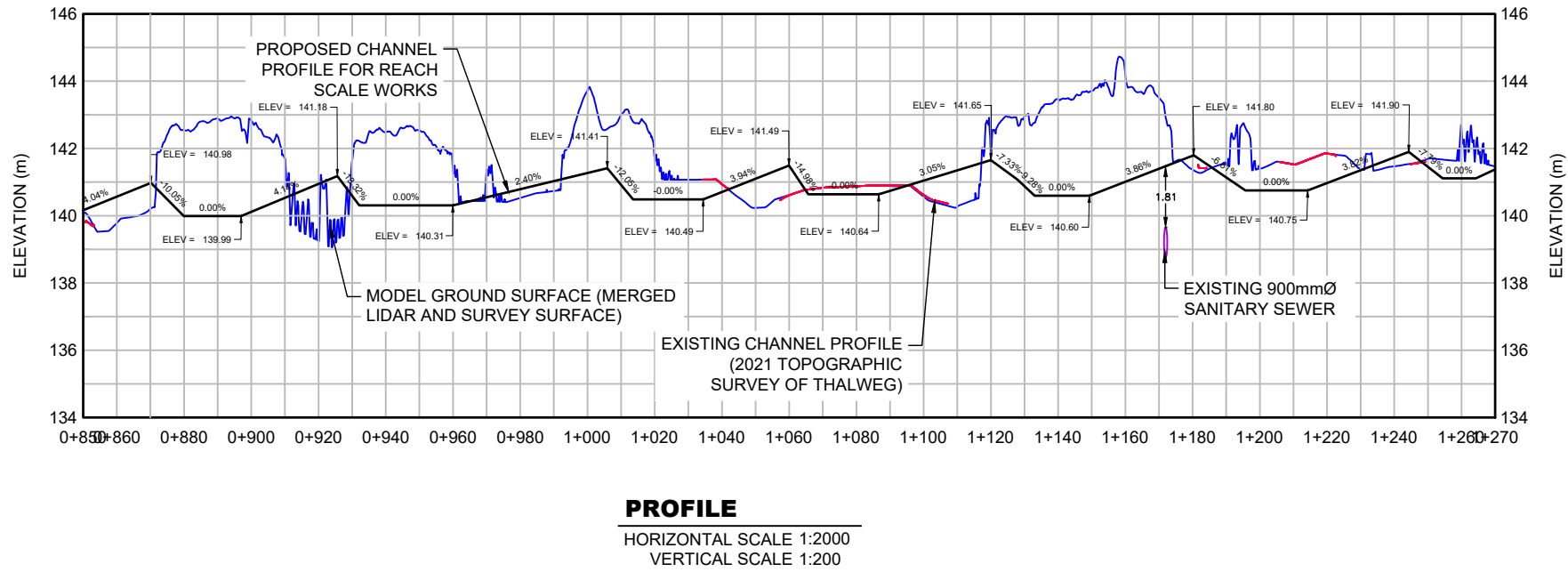
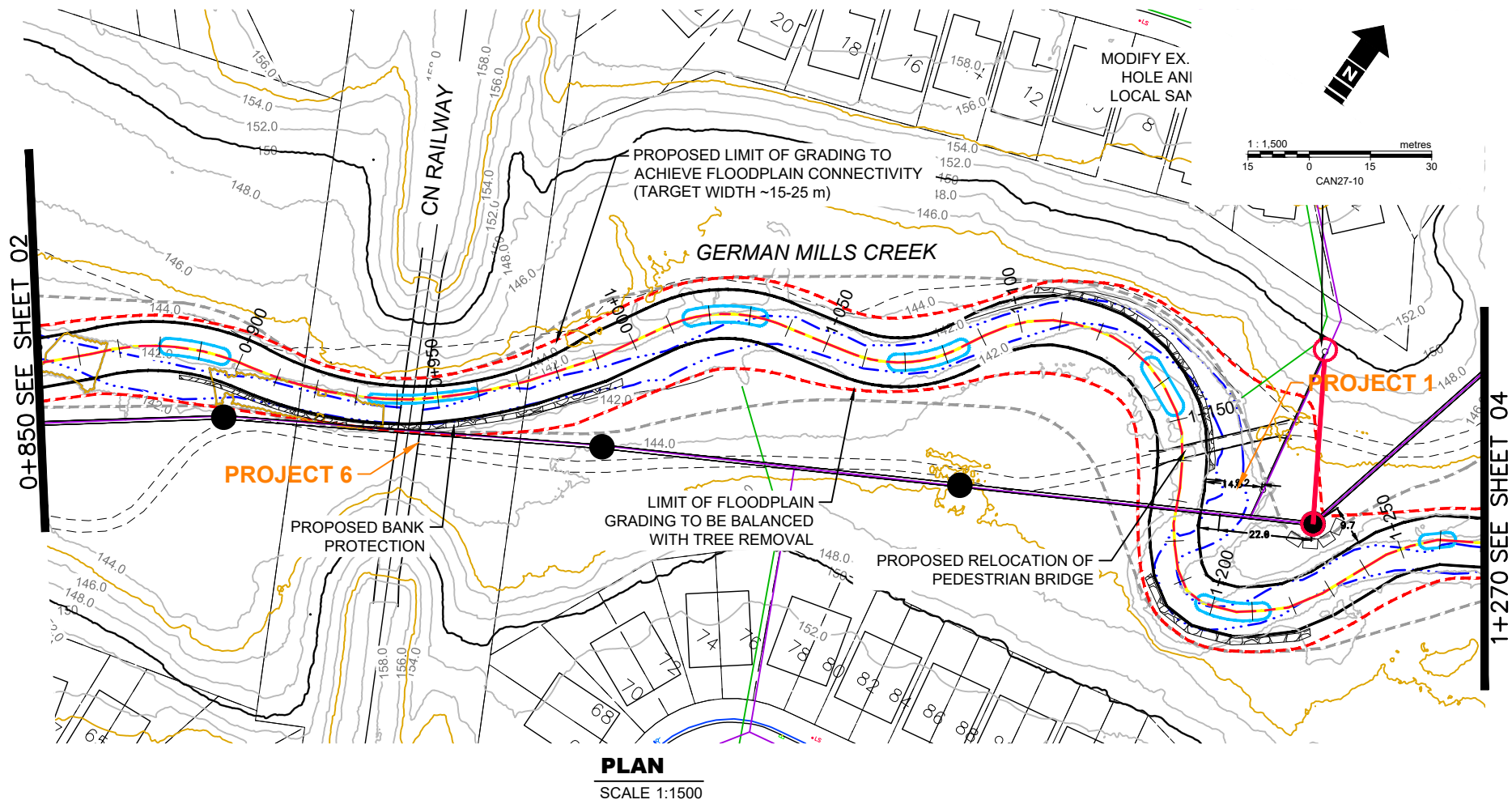
DATE: APRIL 2022	TECHNICAL: N. CYPLES	REVIEWER: R. PHILLIPS	DRAWN: K. WEILER
PROJECT: 32227-504		REVISION: A	DRAWING: F1v

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REFERENCE:

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2. MAPPED CREEK ALIGNMENT ON PLAN FROM 2018 ORTHOPHOTOGRAPHY DIGITIZED BY MATRIX SOLUTIONS.
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5. COORDINATE SYSTEM ONTARIO MTM ZONE 10 NAD27.



KEY MAP
NOT TO SCALE

LEGEND

LOT LINE	CHANNEL REALIGNMENT
RIVER SHORELINE	CHANNEL BANK
THALWEG	MINIMUM GRADING LIMIT
TRAIL	MAXIMUM GRADING LIMIT
EXISTING CONTOUR (2m INTERVAL)	EXISTING ARMOURSTONE
SANITARY SEWER	PROPOSED BANK AND TOE RESTORATION WITH EXPOSED ARMOURSTONE
STORM SEWER	PROPOSED BANK AND TOE RESTORATION WITH BURIED ARMOURSTONE
WATERMAIN	PROPOSED BANK RESTORATION AND BIOENGINEERING
SANITARY SEWER	RIFFLE
MAINTENANCE HOLE	POOL

REVISION					
B	2023-01-30	ISSUE FOR REVIEW	NC	RP	KW
A	2022-06-23	ISSUE FOR REVIEW	NC	RP	KW
No.	DATE	DESCRIPTION	BY	CHK.	DRN.

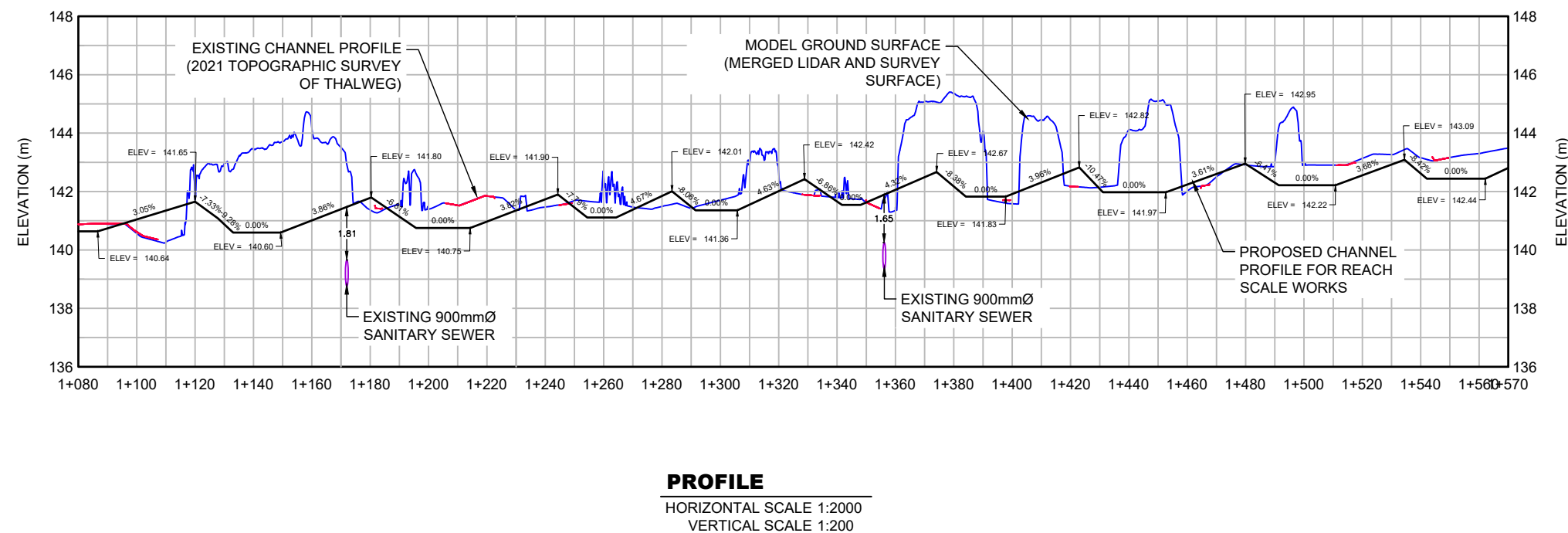
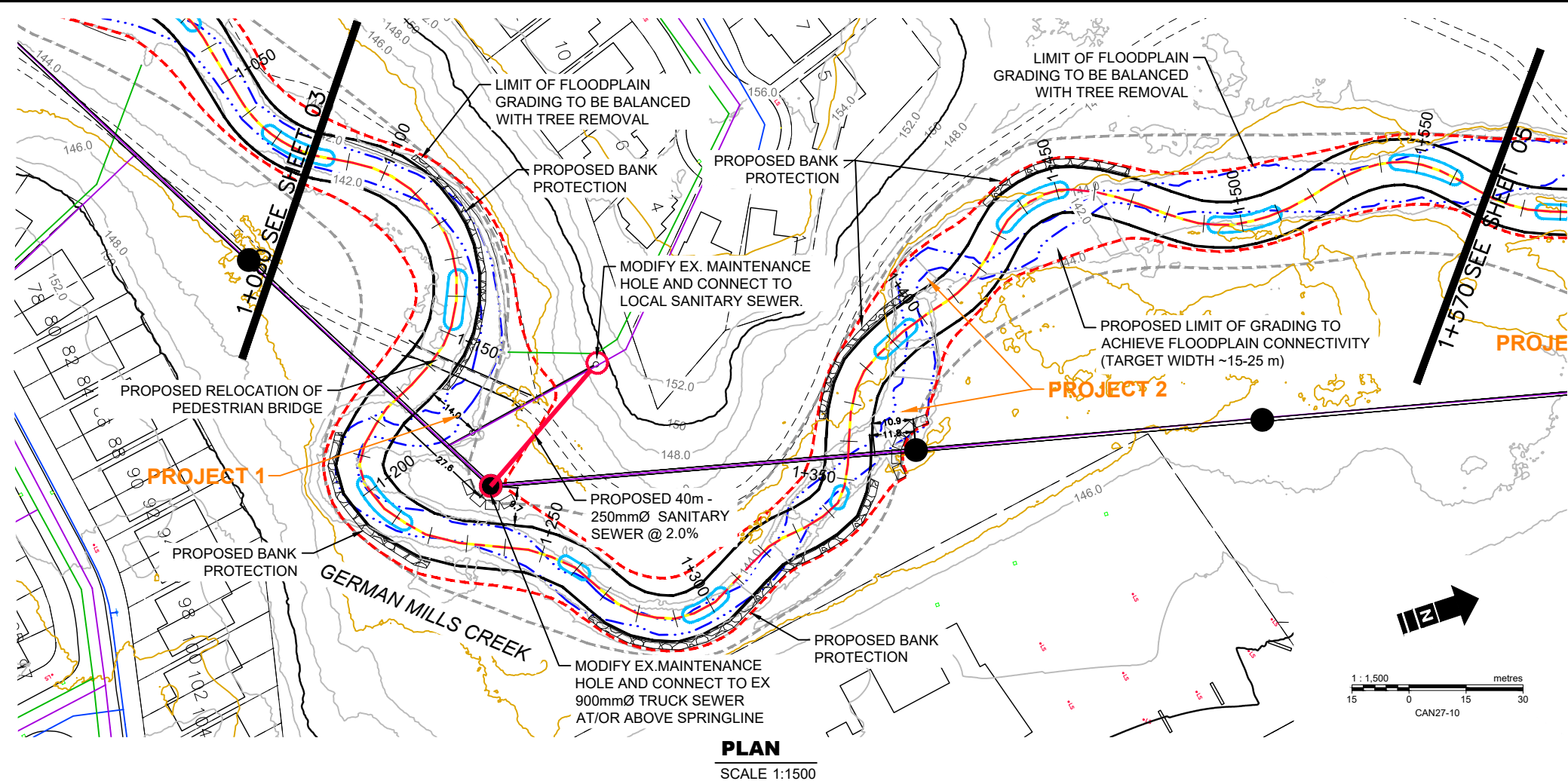


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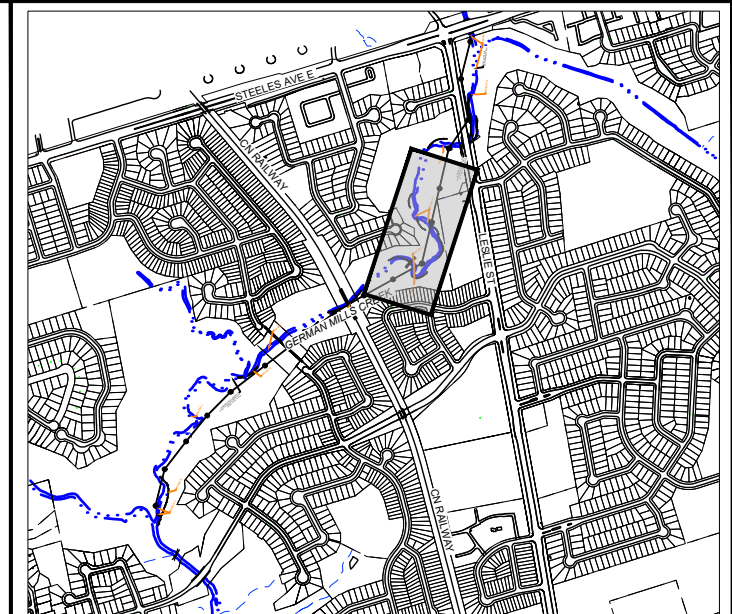
**ALTERNATIVE 4 - REACH SCALE WORKS
STA. 0+850 TO 1+270**

DATE:	APRIL 2022	TECHNICAL:	N. CYPLES	REVIEWER:	R. PHILLIPS	DRAWN:	K. WEILER
PROJECT:	32227-504	REVISION:	A	DRAWING:	F1w		

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 5. COORDINATE SYSTEM ONTARIO MTM ZONE 10 NAD27.



KEY MAP
NOT TO SCALE

LEGEND

	LOT LINE		CHANNEL REALIGNMENT
	RIVER SHORELINE		CHANNEL BANK
	THALWEG		MINIMUM GRADING LIMIT
	TRAIL		MAXIMUM GRADING LIMIT
	EXISTING CONTOUR (2m INTERVAL)		EXISTING ARMOURSTONE
	SANITARY SEWER		PROPOSED BANK AND TOE RESTORATION WITH EXPOSED ARMOURSTONE
	STORM SEWER		PROPOSED BANK AND TOE RESTORATION WITH BURIED ARMOURSTONE
	WATERMAIN		PROPOSED BANK RESTORATION AND BIOENGINEERING
	SANITARY SEWER		MAINTENANCE HOLE
	MAINTENANCE HOLE		POOL

REVISION					
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A	2022-06-23	ISSUE FOR REVIEW	NC	RP	KW
No.	DATE	DESCRIPTION	BY	CHK.	DRN.



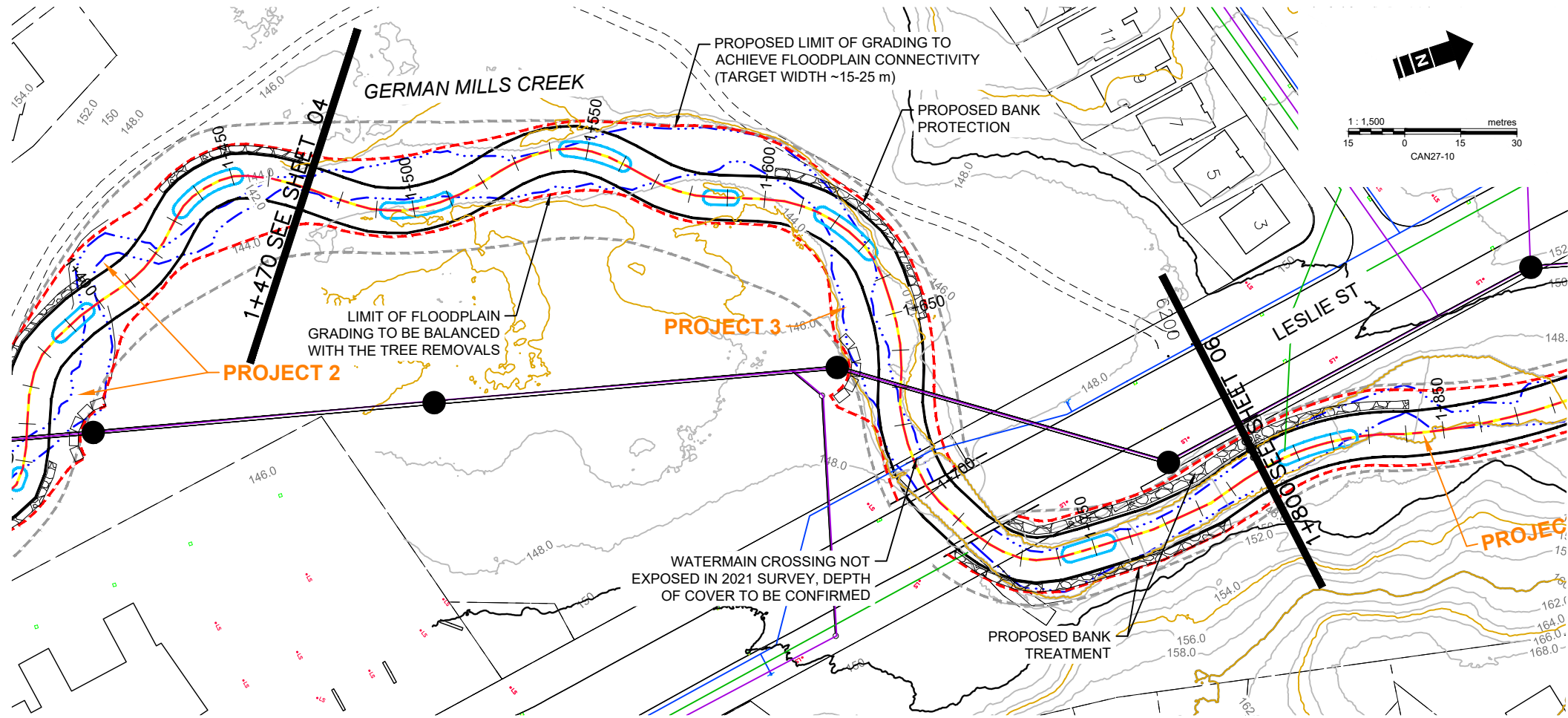
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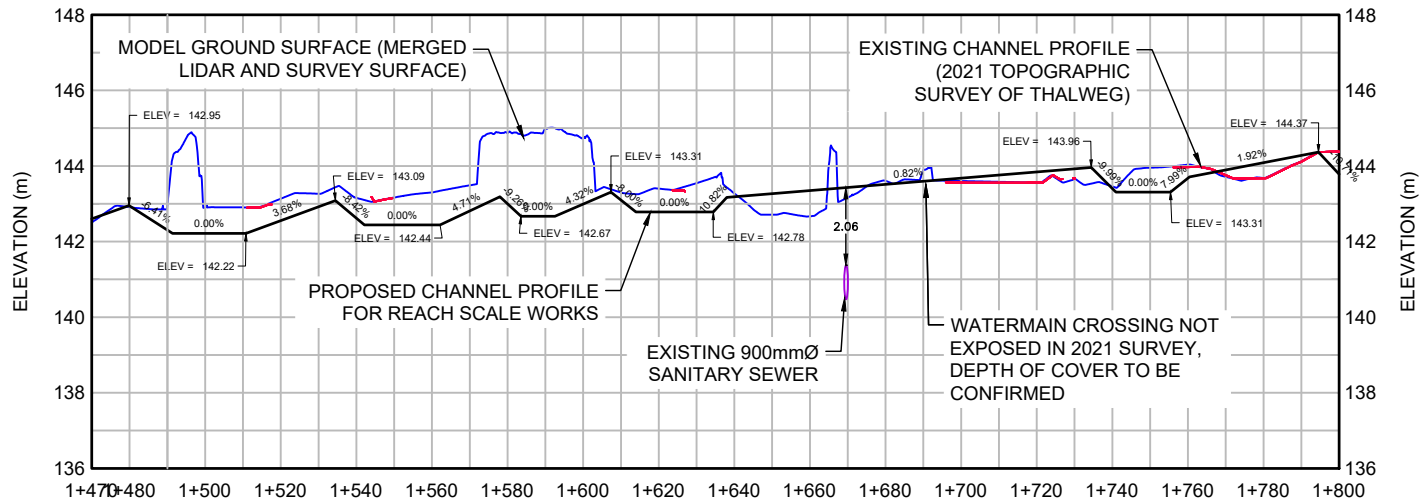
ALTERNATIVE 4 - REACH SCALE WORKS STA. 1+080 TO 1+570

DATE:	APRIL 2022	TECHNICAL:	N. CYPLES	REVIEWER:	R. PHILLIPS	DRAWN:	K. WEILER
PROJECT:	32227-504			REVISION:	A	DRAWING:	F1x

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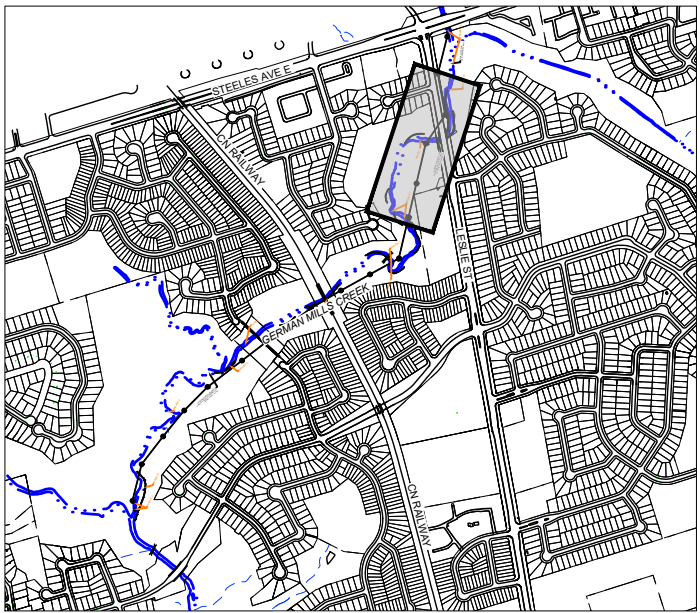


PLAN
SCALE 1:1500



PROFILE
HORIZONTAL SCALE 1:2000
VERTICAL SCALE 1:200

- REFERENCE:
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 5. COORDINATE SYSTEM ONTARIO MTM ZONE 10 NAD27.



KEY MAP
NOT TO SCALE

LEGEND	
	LOT LINE
	RIVER SHORELINE
	THALWEG
	TRAIL
	EXISTING CONTOUR (2m INTERVAL)
	SANITARY SEWER
	STORM SEWER
	WATERMAIN
	SANITARY SEWER
	MAINTENANCE HOLE
	CHANNEL REALIGNMENT
	CHANNEL BANK
	MINIMUM GRADING LIMIT
	MAXIMUM GRADING LIMIT
	EXISTING ARMOURSTONE
	PROPOSED BANK AND TOE RESTORATION WITH EXPOSED ARMOURSTONE
	PROPOSED BANK AND TOE RESTORATION WITH BURIED ARMOURSTONE
	PROPOSED BANK RESTORATION AND BIOENGINEERING
	RIFFLE
	POOL

REVISION					
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No.	DATE	DESCRIPTION	BY	CHK.	DRN.

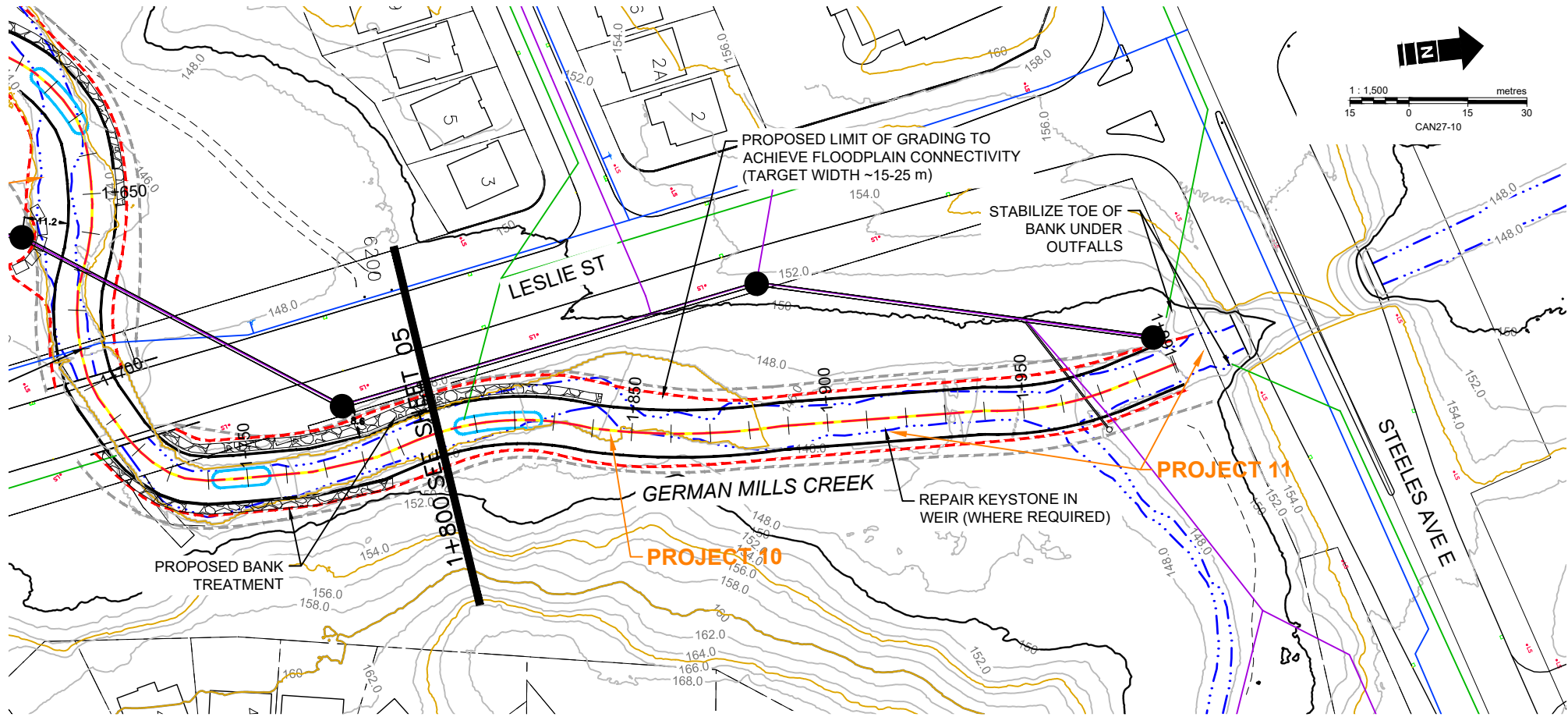


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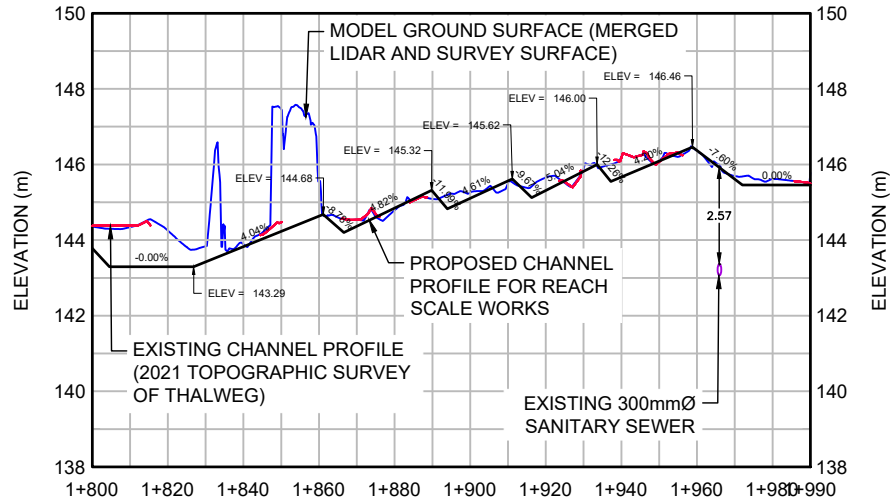
**ALTERNATIVE 4 - REACH SCALE WORKS
STA. 1+470 TO 1+800**

DATE:	APRIL 2022	TECHNICAL:	N. CYPLES	REVIEWER:	R. PHILLIPS	DRAWN:	K. WEILER
PROJECT:	32227-504	REVISION:	A	DRAWING:	F1y		

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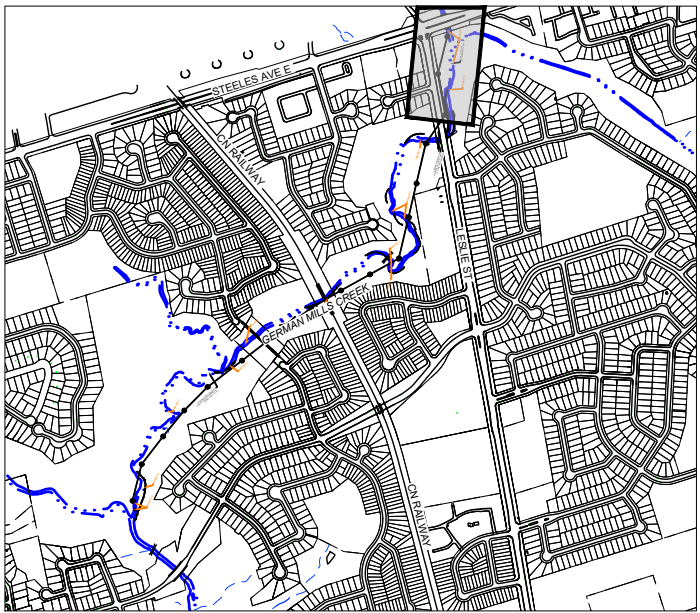


PLAN
SCALE 1:1500



PROFILE
HORIZONTAL SCALE 1:2000
VERTICAL SCALE 1:200

- REFERENCE:
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KEY MAP
NOT TO SCALE

LEGEND	
LOT LINE	CHANNEL REALIGNMENT
RIVER SHORELINE	CHANNEL BANK
THALWEG	MINIMUM GRADING LIMIT
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**ALTERNATIVE 4 - REACH SCALE WORKS
STA. 1+800 TO 1+990**

DATE:	APRIL 2022	TECHNICAL:	N. CYPLES	REVIEWER:	R. PHILLIPS	DRAWN:	K. WEILER
PROJECT:	32227-504	REVISION:	A	DRAWING:	F1z		

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